



#### Models:

- Prestige 653HWI ADSL Security Gateway over POTS
- Prestige 653HWI ADSL Security Gateway over ISDN
- Prestige 653HWI ADSL Security Gateway over U-R2

ZyXEL's Prestige 653HWI is a powerful, all-in-one ADSL security gateway for SOHO and SMB applications. The security gateway integrates high-speed ADSL access, 4-port 10/100Mbps auto MDI/MDIX Ethernet switch, built-in ISDN backup, and IEEE 802.11g standard high-speed wireless connectivity.

The Prestige 653HWI is compliant with IEEE 802.11g standard technology which enables high-speed wireless communication speeds of up to 54Mbps. IEEE 802.11g, which is up to 5 times faster than IEEE 802.11b is a perfect solution for bandwidth-demanding applications. The Prestige 653HWI, however, can also interoperate with existing 11Mbps 802.11b equipment already deployed in the current market, promoting a smooth transition into the newer technology.

Powered by an ICSA certified Firewall platform and a high-performance hardware-accelerated VPN, the Prestige 653HWI provides robust Firewall protection from malicious intrusions and superior IPSec VPN protection with high-speed throughput.

Additional features such as auto fail-over/fall-back WAN backup mechanism including built-in ISDN Dial Backup and Traffic Redirect, as well as IP layer QoS Bandwidth Management, maximize performance while minimizing operation and maintenance costs. Management is further simplified with an intuitive Multilingual (English, German, French) Web-based configurator and administrator wizards.

Scalable, secure, and easy-to-use, ZyXEL's Prestige 653HWI is the ideal secure broadband solution to meet today's versatile business needs.

## Benefits

## **High-speed Internet Access**

The Prestige 653HWI is compliant with ADSL forum standards and is capable of supporting downstream transmission rates of up to 8Mbps and upstream rates of up to 832 Kbps.

## Robust, State-of-the-Art Firewall Security

The ICSA certified ZyNOS operating system ensures state-of-the-art Firewall performance and robust security from the Prestige 653HWI. Based on Stateful Packet Inspection and Denial of Service (DoS), it provides the first line of defense against hackers, network intruders, and other hazardous threats.

### **VPN (Virtual Private Network) Support**

The Prestige 653HWI supports standard IPSec VPN, suitable for site-tosite and remote access deployment. Data encryption over the Internet ensures secure transmission of data between two sites, and can be used to replace a private leased line or frame relay network, allowing global interconnectivity at a minimal expense. The Prestige 653HWI adopts a hardware-based DES/3DES accelerator which enhances VPN performance.

#### IEEE 802.11g Wireless Access Point

The Prestige 653HWI supports IEEE 802.11g standard, which enables wireless communication speeds of up to 54Mbps. With larger data throughput, excellent wireless coverage, and backward compatibility with 802.11b equipment, it is a perfect solution for bandwidth-demanding applications over the wireless LAN.

## Flexible, Highly Available WAN and ISDN Backup

The Prestige 653HWI supports auto fail-over and fall-back WAN Backup Solutions by forwarding traffic to a built-in ISDN TA in case the DSL access connection fails. When the DSL connection is re-established, traffic returns. The built-in ISDN TA interface also allows outside authenticated users to perform remote dial-in for out-of-band management via ISDN connection. It also performs backup functions by redirecting traffic to a specific gateway to ensure high availability of the Internet. The WAN Backup Solution saves the cost of maintenance, and daily operation losses.

### **Effective Network Bandwidth Management**

The Prestige 653HWI enables network administrators to allocate network resources while guaranteeing Quality of Service (QoS). Network Bandwidth Management increases productivity and efficiency by tailoring a system to specific demands such as time-sensitive VoIP and multimedia applications.



DSL 4-port Security Gateway with 802.11g Wireless and ISDN Backup

# Features

#### **ADSL Compliance**

- Multi-Mode ADSL Standard
- RADSL (ANSI T1.413 Issue 2)
- G.dmt ADSL over POTS (G.992.1 Annex A)
- G.dmt ADSL over ISDN (G.992.1 Annex B and U-R2)
- G.lite (G.992.2)
- G.hs (G.994.1)
- Auto-negotiating Rate Adaptation

# **ATM Support**

- 8 PVCs Support
- RFC 1483/2684 Multiple Protocol over AAL5
- RFC 2364 PPP over AAL5
- RFC 2516 PPP over Ethernet
- VC and LLC Multiplexing
- Traffic Shaping UBR, CBR, VBR-nrt
- ATM Forum UNI 3.1/ 4.0 PVC
- I.610 OAM F4/F5 Loop-back, AIS, and **RDI OAM Cells**

### **Firewall Security**

- Stateful Packet Inspection
- Prevent DoS Attack
- Access Control of Service
- Content Filtering
- IP & Generic Packet Filtering
- Real-time Attack Alert and Logs
- DMZ Interface for Public Server\*

# **Specifications**

#### **Hardware Specification**

- ADSL: One RJ-11 or RJ-45 Port
- LAN: 4-Port Switch ,10/100M Auto
- MDI/MDIX
- ISDN: BRI S/T interface

# \* For future release

# Application Diagram

# Internet Security/ISDN Backup/WLAN Applications

- Virtual Private Network
- 20 IPSec VPN Tunnels
- IKE and Manual Key Management
- AH and ESP Protocol
- DES and 3DES Encryption (Hardware DES Engine)
- SHA-1 and MD5 Authentication
- Tunnel and Transport Mode Encapsulation

## Wireless LAN

- IEEE 802.11g/11b Compliance
- Data Rates up to 54Mbps, Auto Fallback
- 64/128 bits WEP Encryption
- MAC Address Filtering
- IEEE 802.1x Port-based Authentication
- RADIUS Support for 802.1x
- 11g turbo mode support

## **Routing Support**

- IEEE 802.1d Transparent Bridging
- IP Routing: TCP, UDP, ICMP, ARP
- RIP1v1 and RIPv2
- IP Multicast IGMP v1/v2

# **ISDN Interface**

- Support DSS1 Switch Type
- · Bandwidth on Demand

• LAN Fax, Telephony and File Transfer

• SUA/Multi-NAT Internet Sharing

Application/Multimedia Support

• Multilingual Web based Configurator

• DHCP Server/Relay/Client

**IP Management** 

DNS Proxy

• Dynamic DNS

• UPnP Support

SNMP Support

• SPTGEN support

• Traffic Redirect

• Call Scheduling

Budget Management

Application

**Network Management** 

(English/German/French)

• Command-line Interpreter (CLI)

• FTP/TFTP firmware upgrade and

configuration backup/restore

• Built-in Diagnostic Tool

• Built-in ISDN Dial Backup

• IP QoS Bandwidth Management

• ZyXEL Vantage CNM Support\*

• Port based VLAN for Ethernet & WLAN\*

• Telnet Remote Management

with NetCAPI function support\* (Optional)

INTERNET 11g PC Card (ZyAIR G-100) Attacl Prestige 653HW ISDN Network 11g PCI Card (ZvAIR G-300) 11g Ethernet Adapter (ZyAIR G-400) **Virtual Private Network Applications** INTERNET Prestige 653HW Home/Branch Office Mobile L (ZyXEL/SSH Sentin Prestige 653HW ZyXEL UPnP Zynes FC (E Headquarters North America Tel: +1-800-255-4101, +1-714-632-0882 Fax: +1-714-632-0858

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65,100,65300

- Wireless-Ready Slot

- Auto Fail-over and Fall Back ISDN Backup

# **Physical Specification**

- Dimensions: 248(L) x 168(D) x 37(H) mm
- Weight: 619g

## **Operating Environment**

- Temperature: 0 ~ 40°C
  - Humidity: 20 ~ 85% (non-condensing)

- Console: RS-232 DB9 Port
- Reset Button
- Status LEDs Indicator
- Power: 16V AC
- ISDN LAN to LAN Connection • Out-of-band Management via ISDN